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see page-b

DATE: 10/02/2002 RAW SEQUENCE LISTING TIME: 09:40:40 . PATENT APPLICATION: US/10/019,906A

Input Set : N:\Crf4\09232002\J019906.raw Output Set: N:\CRF4\10022002\J019906A.raw

1 <110> APPLICANT: Richardson, Peter Cox, Peter 3 <120> TITLE OF INVENTION: A Method for Amplifying Low Abundance Nucleic Acid Sequences and Means 4 for Performing Said Method 5 <130> FILE REFERENCE: GJE-83 6 <140> CURRENT APPLICATION NUMBER: US/10/019,906A 7 <141> CURRENT FILING DATE: 2002-08-23 8 <150> PRIOR APPLICATION NUMBER: US 60/144,666 9 <151> PRIOR FILING DATE: 1999-07-19 10 <160> NUMBER OF SEQ ID NOS: 53 11 <170> SOFTWARE: PatentIn version 3.1 ENTERED 13 <210> SEQ ID NO: 1 14 <211> LENGTH: 20 15 <212> TYPE: DNA 16 <213> ORGANISM: Artificial Sequence 17 <220> FEATURE: 18 <223> OTHER INFORMATION: oligonucleotide 19 <400> SEQUENCE: 1 20 20 ctgcatctat ctaatgctcc 22 <210> SEQ ID NO: 2 23 <211> LENGTH: 21 24 <212> TYPE: DNA 25 <213> ORGANISM: Artificial Sequence 26 <220> FEATURE: 27 <223> OTHER INFORMATION: oligonucleotide 28 <400> SEQUENCE: 2 21 ctgcatctat ctagtacgcg t 31 <210> SEQ ID NO: 3 32 <211> LENGTH: 38 33 <212> TYPE: DNA 34 <213> ORGANISM: Artificial Sequence 35 <220> FEATURE: 36 <223> OTHER INFORMATION: oligonucleotide 37 <220> FEATURE: 38 <221> NAME/KEY: misc_feature 39 <222> LOCATION: (38)..(38) 40 <223> OTHER INFORMATION: n = a, c, g, or t. 41 <400> SEQUENCE: 3 38 ctctcaagga tcttaccgct ttttttttt tttttvn W-->4244 <210> SEQ ID NO: 4 45 <211> LENGTH: 30

47 <213> ORGANISM: Artificial Sequence

46 <212> TYPE: DNA

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Input Set: N:\Crf4\09232002\J019906.raw
Output Set: N:\CRF4\10022002\J019906A.raw

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     50 <220> FEATURE:
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     53 <223> OTHER INFORMATION: n = a, c, g, or t.
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     58 <211> LENGTH: 30
     59 <212> TYPE: DNA
     60 <213> ORGANISM: Artificial Sequence
     61 <220> FEATURE:
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     63 <220> FEATURE:
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     66 <223> OTHER INFORMATION: n = a, c, q, or t.
     67 <400> SEQUENCE: 5
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     72 <212> TYPE: DNA
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     74 <220> FEATURE:
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     76 <220> FEATURE:
     77 <221> NAME/KEY: misc_feature
     78 <222> LOCATION: (21)..(25)
     79 <223> OTHER INFORMATION: n = a, c, g, or t.
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W--> 81
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     89 <220> FEATURE:
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     100 <220> FEATURE:
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Input Set : N:\Crf4\09232002\J019906.raw
Output Set: N:\CRF4\10022002\J019906A.raw

		OTHER INFORMATION: oligonucleotide	
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103		cactggtacg tgggtgagg	19
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		LENGTH: 22 TYPE: DNA	
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		FEATURE:	
		OTHER INFORMATION: oligonucleotide	
		SEQUENCE: 9	
112		tttgacatga tacagggact gc	22
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116	<212>	TYPE: DNA	
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		FEATURE:	
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123	<210>	SEQ ID NO: 11	
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		TYPE: DNA	
		ORGANISM: Artificial Sequence	
		FEATURE:	
		OTHER INFORMATION: oligonucleotide	
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		SEQ ID NO: 12	
		LENGTH: 20	
		TYPE: DNA	
		ORGANISM: Artificial Sequence	
		FEATURE:	
		OTHER INFORMATION: oligonucleotide SEQUENCE: 12	
139	\400 >	actgccaaga ctgagtggct	20
	~210×	SEQ ID NO: 13	20
		LENGTH: 22	
		TYPE: DNA	
		ORGANISM: Artificial Sequence	
		FEATURE:	
		OTHER INFORMATION: oligonucleotide	
		SEQUENCE: 13	
148		aatggtttga tgggtaaaat gc	22
	<210>	SEQ ID NO: 14	_
		LENGTH: 20	
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		ORGANISM: Artificial Sequence	
154	<220>	FEATURE:	
155	<223>	OTHER INFORMATION: oligonucleotide	

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Input Set : N:\Crf4\09232002\J019906.raw

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		SEQUENCE: 14	
157		actetgetga gcetggatgt	20
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164	<223>	OTHER INFORMATION: oligonucleotide	
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166		accagggaca ccttgcttc	19
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169	<211>	LENGTH: 19	
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171	<213>	ORGANISM: Artificial Sequence	
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174	<400>	SEQUENCE: 16	
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184		tggaaggaaa ggcagtagtc a	21
186	<210>	SEQ ID NO: 18	
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188	<212>	TYPE: DNA	
189	<213>	ORGANISM: Artificial Sequence	
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191	<223>	OTHER INFORMATION: oligonucleotide	
192	<400>	SEQUENCE: 18	
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198	<213>	ORGANISM: Artificial Sequence	
		FEATURE:	
200	<223>	OTHER INFORMATION: oligonucleotide	
201	<400>	SEQUENCE: 19	
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		ORGANISM: Artificial Sequence	
		FEATURE:	
		OTHER INFORMATION: oligonucleotide	
210	<400>	SEQUENCE: 20	



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Input Set : N:\Crf4\09232002\J019906.raw
Output Set: N:\CRF4\10022002\J019906A.raw

			1.0
211		cagacttege cetteette	19
		SEQ ID NO: 21	
		LENGTH: 21	
		TYPE: DNA	
		ORGANISM: Artificial Sequence	
		FEATURE:	
		OTHER INFORMATION: oligonucleotide	
	<400>	SEQUENCE: 21	
220		tcaattcact ccctgtgttc c	21
		SEQ ID NO: 22	
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		TYPE: DNA	
225	<213>	ORGANISM: Artificial Sequence	
		FEATURE:	
227	<223>	OTHER INFORMATION: oligonucleotide	
228	<400>	SEQUENCE: 22	
229		ctggaaagag gagccttgtg	20
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234	<213>	ORGANISM: Artificial Sequence	
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236	<223>	OTHER INFORMATION: oligonucleotide	
237	<400>	SEQUENCE: 23	
238		ctgagacgga aaggaacagc	20
240	<210>	SEQ ID NO: 24	
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243	<213>	ORGANISM: Artificial Sequence	
244	<220>	FEATURE:	
245	<223>	OTHER INFORMATION: oligonucleotide	
246	<400>	SEQUENCE: 24	
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250	<211>	LENGTH: 20	
251	<212>	TYPE: DNA	
252	<213>	ORGANISM: Artificial Sequence	
253	<220>	FEATURE:	
254	<223>	OTHER INFORMATION: oligonucleotide	
		SEQUENCE: 25	
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		LENGTH: 20	
		TYPE: DNA	
		ORGANISM: Artificial Sequence	
		FEATURE:	
		OTHER INFORMATION: oligonucleotide	
		SEQUENCE: 26	
265		cgttctgggc taggagtctg	20

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RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/019,906A

Input Set: N:\Crf4\09232002\J019906.raw
Output Set: N:\CRF4\10022002\J019906A.raw

Please Note:

Seq#:3; N Pos. 38

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:4; N Pos. 21,22,23,24,25
Seq#:5; N Pos. 21,22,23,24,25
Seq#:6; N Pos. 21,22,23,24,25
Seq#:7; N Pos. 21,22,23,24,25
Seq#:42; N Pos. 54
Seq#:43; N Pos. 29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45
Seq#:44; N Pos. 67
Seq#:45; N Pos. 78
Seq#:46; N Pos. 68
Seq#:47; N Pos. 68
Seq#:47; N Pos. 67
Seq#:48; N Pos. 67
Seq#:48; N Pos. 67
Seq#:48; N Pos. 67
Seq#:49; N Pos. 67
```

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 3

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/019,906A

DATE: 10/02/2002 TIME: 09:40:41

Input Set: N:\Crf4\09232002\J019906.raw
Output Set: N:\CRF4\10022002\J019906A.raw

L:42 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:55 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:68 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:81 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:94 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:413 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
L:426 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0
L:440 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:60
L:454 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:60
L:468 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:60
L:481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:60
L:482 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:60
L:496 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:60
L:496 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:60
L:509 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0
L:523 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:60